

GULUBOV, S.

Electrophoretic considerations on immunity of chickens vaccinated against
Pasteurella. Izv. Mikrob. inst., Sofia no.9:161-166 1958.

(PASTEURELLA,

 avicida, immun. in vaccinated chickens (Bul))

(FOWL, DOMESTIC, diseases,

 Pasteurella avicida infect., immun. in vaccinated chickens (Bul))

GULUBOV, S.

Ultrasonic-treated vaccine against avian Pasteurella infection. Izv.
Mikrob. inst., Sofia no.9:167-173 1958.

(PASTEURELLA,
avicida, ultrasonic-treated vaccine for chickens (Bul))

(FOWL, DOMESTIC, diseases,
Pasteurella avicida infect., ultrasonic-treated vaccine (Bul))

POPOV, A.; KARABASHEV, N.; GULUBOV, S.; KARABASHEVA, T.

Investigations on immunogenic and toxinogenic properties of *Salmonella typhosa*. Izv. Mikrob. inst., Sofia no.9:175-181 1958.

(ULTRASONICS, effects,
on *Salmonella typhosa* & *Shigella dysenteriae* (Bul))
(*SALMONELLA TYPHOA*, effect of radiations,
ultrasonics (Bul))
(*SHIGELLA DYSENTERIAE*, effect of radiations,
same)

COUNTRY	: BULGARIA	V
CATEGORY	: Pharmacology and Toxicology. Medicinal Plants	
APS. JOUR.	: RZhBiol., No. 1 1959, No. 4600	
AUTHOR	: Panayotov, P.; Kalaydzhiyev, A.; G"l"bov, S.	
INST.	: -	
TITLE	: Experiments for Studying the Action of Infusions of Teucrium chamaedrys in vitro Upon the Micro- organisms Most Frequently Encountered in Diseases	
ORIG. PUB.	: of the Digestive Tract Farmatsiya (Bulg.), 1957, 7, No.4, 30-32	
ABSTRACT	: The action of 5% infusion of sprouts of Teucrium chamaedrys upon <i>Bacillus coli</i> , <i>Proteus</i> , pathogens of dysentery, typhoid fever and paratyphoids, and upon <i>Staphylococcus aureus</i> , was investigated experimentally. The bacteriostatic action was evaluated according to halo diameters by using the diffusion method. In the cultures of dysen- tary bacilli the halo diameters measured 2-12 mm, in paratyphoid cultures 3-5 mm and in typhoid cultures 1 mm. To explain the mechanism of bacte-	
CARD:	1/2	

COUNTRY :
CATEGORY :

V

ABS. JOUR. : RZhBiol., No. 1 1959, No. 4600

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : riostatic action, the binding of oxygen, as well
cont'd as catalase and protease activity, were studied
by means of Geyrovskiy's polarograph. The vari-
ations of these values are less marked than those
under the action of penicillin.-- K. I. Draganov

CARD:

2/2

33

COUNTRY : BULGARIA
CATEGORY : Zooparasitology. Parasitic Protozoa. Flagellata
REG. NUMBER : RChBiol., No. 2 1959, №. 5692
6
AUTHOR : Angelov, S.; ^{U U} Atanasov, S.; Ginev, A.; Nikolov,^{*}
INST. : Microbiological Institute, Bulgarian AS
TITLE : Investigation of Patients with Oligophrenia for
Toxoplasmosis

ORIG. PUB. : Izv. Mikrobiol. in-t. Bulg. AS, 1958, kn. 9,
55-59

ABSTRACT : In two homes for oligophrenic patients, an investigation of 165 patients was carried out by means of allergic and serological reactions. 30 of them showed positive results in investigation for toxoplasmosis by means of a cutaneous reaction, and 14 by a complement-fixation test.

*P.: Atanasov, A.

CARD: 1/2

10

COUNTRY :	G
CATEGORY :	
PERIODICAL : JPN. J. NEUROL., No. 2 1959, No. 1102	
AUTHOR :	
INST. :	
TITLE :	
EDITION PUBL. :	
ABSTRACT cont'd.	Apparently, there exists a definite etiological connection between oligophrenia and toxoplasmosis.-- From the authors' summary
CARD:	2/2

BULGARIA/Diseases of Farm Animals - Diseases Caused by Bacteria
and Fungi R

Abs Jour : Ref Zhur Biol., No 5, 1959, 21407

Author : G"l"bov, S.

Inst : Microbiological Institute, Bulgarian AS.

Title : A New Method of Obtaining a Vaccine Against Pasteurellosis
in Poultry. Preliminary Report.

Orig Pub : Izv. Microbiol. in-t B'lg. AN, 1957, 8, 263-268

Abstract : No abstract.

Card 1/1

BULGARIA/Diseases of Farm Animals - Diseases Caused by Bacteria and Fungi R

Abs Jour : Ref Zhur Biol., No 5, 1959, 21408

Author : G"l"bov, S.

Inst : Microbiological Institute, Bulgarian AS

Title : On the Problem of Ultrasonic Vaccine Against Pasteurellosis of Poultry.

Orig Pub : Izv. Mikrobiol. in-t B"lg. AN, 1958, Kn. 167-173

Abstract : No abstract.

Card 1/1

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J
GULOLOV, S.

"A new method for obtaining full antigen from Salmonella." In German.
p. 69

DOKLADY. Sofiia, Bulgaria, Vol. 12, No. 1, January/ February, 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 9, No. 2,
February, 1960. Uncl.

GULUBOV, S.

Studies on the experimental changes of the bacterium ecli. Izv biol
med. BAN 3 no.2:97-105 '59. (EEAI 10:4)

1. Mikrobiologicheski institut pri BAN
(ESCHERICHIA COLI)

GULUBOV, S.

Ultrasonics and its biological significance. Prir i znanie 12 no.10:
20-21 D '59. (EEAI 9:10)
(Ultrasonics)

ANGELOV, St, akad.; GULUBOV, S., d-r; NIKOLOV, P., d-r

Animals as a source of human toxoplasmosis. Izv. mikrob. inst.,
Sofia no. 11:23-29 '60.
(TOXOPLASMOSIS transm.)

GULUBOV,S.,d-r

Biological properties of complete antigens of Salmonella obtained under the influence of ultrasounds. Izv. mikrob. inst., Sofia no.11:53-64 '60:

(ULTRASOMICS)
(SALMONELLA immunol.)
(ANTIGENS)

GULUBOV,S.

Bio-products of microorganism produced under the influence of
ultrasounds. Izv. mikrob. inst., Sofia no.11:65-83 '60.
(BACTERIA)
(ULTRASONICS)
(IMMUNITY)

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R000617320003-9

GULUBOV, S.; NIKOLOV, P.

Comparative studies on humoral immunity in certain mammals and birds.
Izv. Mikrob. inst., Sofia no.11:85-94 '60.
(BRUCELLOSIS immunol.)

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R000617320003-9"

S/194/61/000/012/074/097
D273/D301

AUTHORS: G"l Vbov, S., Zheleva, M. and Danov, At.

TITLE: Experiments on preparing the triple vaccine TAB by an ultrasonic method

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 12, 1961, 18, abstract 12E96 (zv. Mikrobiol.in-t B"lg. AN, 1960, 12, 71-78)

TEXT: Experimental methods are described using an ultrasonic method for preparing the triple vaccine (T) TAB, an inoculative preparation serving as a culture for three organisms: Typhoid and paratyphoid fever A and B. Preparation of T was carried out with vaccinal growths of several types (3) of each of these organisms. Originally, the properties of the vaccinal growths were studied, from which microbe suspensions were prepared. In order to compare the results of ultrasonic method of inactivation with existing methods, each growth was divided into 3 parts: One part was sounded, another was treated by 0.3% formalin, the third was heated for

Card 1/2

Experiments on preparing ...

S/194/61/000/012/074/097
D273/D301

60 minutes at 800 Kc/s at an acoustic intensity of 10 volts/cm² at the transmitting surface of the vibrator. The morphologic and se-rologic properties of the growths were checked. The immunity and toxicity of the suspensions and T were studied. Investigation of immunity was carried out on mice. The sounded suspensions in com-parison to the formalin preparation or the heated preparation have increased immunity. T sounded with subsequent heating in com-parison to the heated one only has a decrease in immunity. T soun-ded with subsequent treatment by formalin compared to the only one treated by formalin has increased immunity. 4 tables, 14 referen-ces. /- Abstractor's note: Complete translation. /

Card 2/2

GULUBOV, S.

Studies on the amino acid composition and pathogenic properties of experimentally modified strains of *Bacterium coli*. *Izv. mikrobiol. inst. (Sofia)* 13:37-44 '61.

(*ESCHERICHIA COLI*) (AMINO ACIDS metab)

GULUBOV, S.; NIKOLOV, P.; MINCHEV, I.

Quantitative changes in leukocytes of sheep immunized with a Brucella vaccine. Izv. mikrobiol. inst. (Sofia) 13:45-51 '61.

(LEUKOCYTE COUNT) (VACCINATION blood)
(BRUCELLOSIS immunol)

GULUBOV, S.; NIKOLOV, P.

Seasonal oscillation of antibodies in sheep immunized with a Brucella vaccine. Izv. mikrobiol. inst. (Sofia) 13:53-63 '61.

(BRUCELLOSIS immunol) (VACCINATION exper)

GALABOV, S. [Gulubov, S.]; NIKOLOV, P.; MINCEV, I. [Minchev, I.]

Relation between antibodies and leucocyte in hens immune with brucellosis antigens. Doklady BAN 14 no.7:735-738 '61.

1. Vorgelegt von Akademiemitglied S. Angeloff [Angelov].

(Antigens and antibodies) (Undulant fever)
(Poultry)

GALABOV, S. [Gulubov, S.]

Studies on the induced variability of *Bacillus coli*. Doklad
BAN 15 no.7:787-790 '62.

1. Vorgelegt von Akademiemitglied S. Angeloff [Angelov, S.].

GULUBOV, S.

Application of fluorescent microscopy in microbiology. Prir i znanie
14 no.5:21-22 My '61. (EEAI 10:9/10)

(X RAYS) (MICROORGANISM)

GULUBOV

- (14)
- Series: Soviet Sci. Press. Materials, Vol. I, No. 7, 1971
(Continued)
- C. S. Tsvetkov, "Effect of the Electric Current on the Structure of Polymers at High Temperatures", pp. 75-76.
10. "Residence and Relaxation of the Birth Surface under the Influence of Substances", G. P. Kostylev, pp. 77-78.
 11. "Electrokinetic Fluctuations in Flat Semiconductors", N. M. Savchenko, pp. 79-80.
 12. "Dislocation Phenomena in Macromolecular Crystallization", L. V. Prokof'yev, pp. 79-80.
 13. "The Interaction of Antimony and Copper in Chalcocite", N. V. Grigorieva and V. S. Olsuf'ev, pp. 81-82.
 14. "The Effect of Mechanical Stress on Free Radicals in Chalcocite", D. A. Kurnikov and N. V. Grigorieva, pp. 83-84.
 15. "Effect of Structure of the Liquid Substrates and Beads on Large Porous Crystals", Z. S. Sivchenko, pp. 85-86.
 16. "Electro-Potentiometric Study of the Chronotropic and Doseotropic Effect of the Soft Vagin", V. V. Sutkov, pp. 87-88.
 17. "Intraocular Pressure in Lifting Heavy Weights", V. A. Berezovskiy, pp. 89-90.
 18. "A Study of Progressive Junction Under Hyperbaric", N. N. Neklyudova, pp. 91-92.

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- 23 -

GALABOV, S.

Studies on induced variability of coli bacteria. Dokl. bolg. akad.
nauk. 15 no.7:787-790 '62.

1. Vorgelegt von Akademietmitglied S. Angeloff.
(ESCHERICHIA COLI) (CULTURE MEDIA) (SALMONELLA)
(ULTRASONICS)

L 18837-63

BDS/EWA(b) Pa-4

ACCESSION NR: AT3003354

B/2507/62/014/000/0157/0161

56
55

AUTHOR: Galabov (Galabov), S., Jeleva (Zheleva), M., Danov (Danov), At.

TITLE: Studies on the effect of ultrasound on the O-antigen of Salmonella,
typhi

SOURCE: Bulgarska akademiya na naukite. Mikrobiologicheski institut. Izvestiya,
v. 14, 1962, 157-161

TOPIC TAGS: Salmonella, O-antigen, ultrasound, antigen composition, bacteria

ABSTRACT: O-antigen obtained from Salmonella typhi strain by Boivin method was exposed for 2 hours to ultrasound 800 KC, 10 W; antigenicity and pyrogenicity in rabbits, immunologic properties in mice as well as immunoelectrophoresis and paper chromatography tests were made comparing the ultrasound-treated antigen with unirradiated specimen. There were no essential differences in the in vivo tests and only the immunoelectrophoresis (Ouchterlony) test indicated that

Card 1/2

L 18837-63
ACCESSION NR: AT3003354

there was some molecular disintegration induced by the irradiation. Orig. art.
has: 2 tables.

ASSOCIATION: Mikrobiologicheski institut (Institute of Microbiology) of BAN

SUBMITTED: 15Nov61

DATE ACQ: 14Jun63

ENCL: 00

SUB CODE: BC

NO REF SOV: 001

OTHER: 009

Card 2/2

L 18836-63

BDS/EWA(b) Pa-4

ACCESSION NR: AT3003353

B/2507/62/014/000/0129/0144

AUTHOR: Gal'bov, S.

54
53

TITLE: Effect of ultrasound on Salmonella gallinarum

SOURCE: Bulgarian akademiya na naukite. Mikrobiologicheski institut, Izvestiya, v. 14, 1962, 129-144

TOPIC TAGS: ultrasound, Salmonella antigen, fowl typhoid immunization, antigen pyrogenicity, antigen toxicity, Salmonella vaccine, poultry

ABSTRACT: Three strains of S. gallinarum were exposed as saline suspensions of 4 densities to 5 - 240 minutes of 10 W, 800 KC ultrasound. Comprehensive studies were then made of morphology (normal and phase-contrast and electron microscopy), agglutinating in chickens, very detailed tests on the O-antigen (obtained by Boivin method); compared with controls, chromatography, starch-gel electrophoresis, pyrogenicity, allergenicity and toxicity tests. Results indicate that ultrasound may well make possible the production of an antigen which is as effective but less pyrogenic and less toxic than that obtained from untreated

Card 1/2

L 18836-63
ACCESSION NR: AT3003353

bacteria. Orig. art. has: 2 graphs, 8 tables, 10 electron-photomicrographs.

ASSOCIATION: Mikrobiologicheski institut (Institute of Microbiology) of BAN

SUBMITTED: 20Mar62 DATE ACQ: 14Jun63 ENCL: 00
SUB CODE: AM NO REF SOV: 001 OTHER: 006

Card 2/2

GALABOV, S. [Gulubov, S.]

The effect of ultrasound on the O-antigen of the Salmonellae,
Doklady BAN 15 no.8:865-867 '62.

1. Submitted by Academician S. Angelov.

C. C
A L N H C V

26

Sofia, Doklady Politekhn. Zashchit. 14, No. 3, 1961

1. "Distribution of Tangential Planes to Surfaces of the Congruence of Straight Lines in the Hyperbolic Space." A. MATHESOV, pp 235-237.
2. "Measuring the Activation Energy of Adsorption Energies in Lead Sulfide." I.V. BELYI and L. SOKOLOV, pp 239-242 (English Summary)
3. "A New Precise Differential Method for Laboratory Purposes". L. SOLODOVNIY and T. SOKOLOV, pp 243-245.
4. "Microquantitative Determination of Chlorine and Iodine Ions." N. OLEKSY and K. KOSOV, pp 247-250.
5. "Comparative Amino Acid Content of the Meats of Some Fish Species." S.I. YALINOV, pp 251-254.
6. "One Method of Removing Sulfur from the Kreislerovskii Lipophilic Oil." N. YANOVSKY, pp 255-257.
7. "Absorption of Nitrogen Oxides in the Vibrating Flame of Sodium Hydroxide Solutions." Part II. D. V. KURCHATOV, L. SOLODOVNIY and D. SOKOLOV, pp 259-267.
8. "On the Rate of Absorption of Zinc Oxide." D. SOKOLOV, D. SOKOLOV and G. SOKOLOVA (IN ENGLISH) pp 263-265.
9. "Effect of Some Inorganic Additives on the Adsorption of Copper Oxide by Carbon Dioxide at Low Temperatures." N.S. KURCHATOV, pp 267-270.
10. "Bergsite from the Radna Mine, Pangea-Basin". T.G. RABICHOV, pp 271-274 (English Summary).
11. "Alumina Separation from Stoyluva, Ardin Basin." T. SOKOLOVSKIY, pp 275-278 (English Summary).
12. "Regarding the Experimental Variability of Escherichia coli." A. GALASOV, pp 279-281.
13. "Studies on the Formation of Capsule by Certain Strains of Bacillus anthracis." G. IV. BELYI, pp 283-285.
14. "Archibacilli and the Particulate-Membrane System. Iron Fixation Activity in Face Treatment with Crystalline Iron Saccharate." Ad. ALEXON, G. SOKOLOVA and D. SOKOLOV, pp 287-290.
15. "Electron Microscopic Study of Lungs of Snakes." N. KARAKHANOV, pp 291-294.
16. "Human Leptospirosis Due to Leptospira saskoobringi in Bulgaria." I. KURUMOV, pp 295-299.

— 42 —

GUDEV, A. V., T.

Attempts to purify the adenosine-potassium complex (α -nucleoside) by fractionation over charcoal, cellulose and gel-filtration. Toksydy Bull. 17 no. 55/59-90 '64

• Submitted by Academy of Medical Sciences.

GRUEV, S.; SUMERSKA, R.

/ Studies on toxic properties and composition of complex *Salmonella gallinarum* antigens obtained from bacterial suspension treated and untreated with ultrasonics. *Zav. mikrobiol. inst. (Sofija)* 14:5-15 '64

Purification of complex *Salmonella gallinarum* f-antigen by the fractionation on ion-exchange DEAE-cellulose and gel filtration. *Ibid.* 12:19-225

GULISOV, S.; SUMERSKA, T.

Attempts to purify the *Salmonella gallinarum* complex C antigen by fractionation over ion-exchange DEAE-cellulose and gel-filtration. Dokl. Bolg. akad. nauk 17 no.5s499-502 '64.

1. Submitted by Academician Al. Toshkov.

DASKALOV, A.; GULUBOV, T.

Cytodiagnosis of pulmonary cancer. Nauch. tr. ISUL, Sofia 2 no.1:
261-280 1953.

1. Vutreshna klinika sus stomachno-chrevni i chernodorbni
zaboliavaniia i lechebno khranene i tsentralna klinichna i
khematologichna laboratorija. Direktor Prof. Tasho A. Tashev.
(LUNGS, neoplasms,
diag., cytol.)

TASHEV, T.; GULUBOV, T.

Treatment of some internal diseases with Bulgarian biomycin. Suvrem. med.,
Sofia 8 no.8:12-21 1957.

1. Iz knedrata na gastroenterologija i dietetika - Isul. Zav. katedrata:
prof. T. Tashev.
(CHLORTETRACYCLINE, ther. use)

BRAIISKI, Khr.; GULUBOV, T.

Effect of fresh cabbage juice and of the decoction of dried cabbage and of cauliflower on gastric secretion and motility. Suvrem. med., Sofia 8 no.8: 30-37 1957.

1. Iz katedrata na gastroenterologija i dietetika - DSUL. Zav. katedrata:
T. Tashev.

(VEGETABLES

cabbage juice & decoction of dried cabbage, eff. on gastric
secretion & motility)

(STOMACH, eff. of drugs on
same)

(GASTRIC JUICE

secretion, eff. of cabbage juice & decoction of dried cabbage)

Gouvern. Zts. S.

8.7-7 351.58 (021)
S. Gobichay, Zh. S. Obshta klimatologija, [General climatology], Bishkek, Bulgaria, Out
of print. 1960. 120 p. 17 x 24 cm. (17.4 x 24.1 cm). 451-581. 1960. 1960.

10 20 50
100 1000

TASHEV, T.; BRAILSKI, Khr.; GULUBOV, T.; OBRETENCOVA, N.

Therapeutic activity of ulcosin in peptic ulcer and chronic gastritis.
Suvrem med., Sofia no.10:3-12 '60.

1. Iz Katedrata po gastroenterologija i dietetika pri ISUL (Rukov.
na katedrata prof. T.Tashev)
(PEPTIC ULCER ther)
(GASTRITIS ther)

GULUBOV, L.

On affect in psychiatric expert testimony. Suvrem med., Sofia no.10:
104-109 '60.

1. Iz Katedrata po psikiatriia pri VMI, Sofia (Rukov. na katedrata
prof. G.Uzunov)
(EMOTIONS jurisprudence)

KHRISTOZOV, Khr.; GULUBOV, L.; BOIADZHIEVA, M.

Neurotic aspects of schizophrenic psychoses. Suvrem med., Sofia
no.11:47-55 '60.

1. Iz Katedrata po psikiatriia pri VMI, Sofia (Rukov. na katedrata
prof. G.Uzunov)
(SCHIZOPHRENIA)

ANGELOV,St.; SPASOVA,N.; KUIUMDZHIEV,I.; GULUBOV, S.; NIKOLOV,P.

Submicrostructure and amino acid composition of experimentally
produced giant bacterial forms. Izv. microbiol. inst. 15:79-88
'63

*

VARTANIAN, A.; MANOLOV, A.; PERFANOV, G.; KOLEV, D.; MILIANCHEV; GULUBOV,
St.; KOSTIANEV, St.

Spring soil tilling, and its influence on the development,
yield and quality of tobacco. Izv Inst tiutium BAN 1:73-118
'61.

GULUBOV, Vasil

Quality of industrial production, main indicator of the economically sound management of industrial enterprises. Tekstilna prom 13 no.5: 36-39 '64.

I. Planning Department of the Osmi Mart State Industrial Enterprise, Sofia.

GULUPOV, Zh. S.

Impressions from the Second Congress of the All-Union Geographical Society. p. 1.
(GEOGRAFILA Vol. 5, No. 2, 1955, Sofiya)

SO: Monthly List of East European Accession, (EVAL), LC, Vol. 4, No. 9,
Sept. 1955, Uncl.

GULUBOV, ZH. S.

B.P.Crlcov, Soviet geographer and guest in our country. p. 22.

Vol. 5, no. 7, 1955
GEOGRAFIIA
Sofiya, Bulgaria

So: eastern European Accession Vol. 5 No. 1 Jan. 1956

GYLYBOV, V.A.S. [Gulubov, Zh.]; IVANOV, Il.; PENCHEV, P.; MISHEV, K.;
MEDELCHEVA, A.; DVORYADKIN, A.I., kand.geogref.nauk [translator];
RETEYUM, Yu.A., red.; BELEVA, M.A., tekhn.red.

[Physical geography of Bulgaria] Fizicheskaya geografiia
Bulgarii. Moskva, Izd-vo inostr.lit-ry, 1960. 361 p. Translated
from the Bulgarian. (MIRA 14:3)

1. Direktor Instituta geografii Bolgarskoy akademii nauk,
chlen-korrespondent Bolgarskoy akademii nauk (for Gylybov).
(Bulgaria--Physical geography)

GULUBOV, Zh.: MISHEV, K., st. n. sutr.: POPOV, Vl.

Terraces in the basin of the Struma River between Kresnenska Klisura and Rupel Pass. Izv Geog inst BAN 6:23-41 '62.

1. Chl.-kor. na Bulgarskata Akademija na naukite i otg. redaktor, "Izvestiia na Geografskiiia institut" (for Gulubov).
2. Chlen i sekretar na Redaktsionnata kolegiia, "Izvestiia na Geografskiiia institut" (for Mishev).

FEDOROV, P. V.; GULUBOV, Zh. [translator]

Correlation between the Quaternary deposits of the Bulgarian Black Sea Littoral and the terraces of the Crimean, Caucasian, and Mediterranean coasts. Izv Geog inst BAN 735-16 '63.

1. Corresponding Member of the Bulgarian Academy of Sciences Responsible Editor and Member of the Board of Editors, "Izvestiya na Geografiskiia institut" (for Gulubov).

GULUBOV, Zh.; MISHEV, K., st. n. sutr.

Tectonic deformations of the Pliocene surfaces on the northern outskirts of the Thracian alluvial depression, west of the Stryama River. Izv Geog inst BAN 7:49-71 '63.

1. Corresponding Member of the Bulgarian Academy of Sciences, Responsible Editor and Member of the Board of Editors, "Izvestiia na Geografkiia institut" (for Gulubov). 2. Secretary and Member of the Board of Editors, "Izvestiia na Geografkiia institut" (for Mishev).

GULUBOVA, Iliana, inzh.

Molecular sieves. Priroda Bulg 13 no. 2:26-31 Mr-Ap '64.

GULUBOVA, L.

A valuable aid to farming. Aviats kosmonavt 6 no. 7:11 '64.

TEMKOV, Iv.; DIMITROV, Khr.; GULUBOVA, M.

Nikola Gavrilov Krustnikov, outstanding Bulgarian psychiatrist.
Suvrem. med., Sofia 7 no.1:109-119 1956.

(BIOGRAPHIES,
Krustnikov, Nikola G. (Bul))

TEMKOV, Iv.; GULUBOVA, M.; DASHINOVA, N.; ATSEV, E.

Clinical and electroencephalographic studies on the therapeutic action of α -ethylsuccinimide and α -methylsuccinimide (Zarontine) in epilepsy (petit mal). Nevropsikh nevrokhir 3 no.1:37-47 '64.

GULUBTSOV, I.V.

Determining the parameters of equivalent circuits of magneto-striction resonators. Vest.Mosk. un.10 no.12:69-73 D '55.

(MLRA 9:5)

1. Kafedra neorganicheskoy khimii.
(Magnetostriction) (Radio circuits)

SOV/133-59-2-23/c.

AUTHORS: Boyko, M.Ye., Gulunov, V.S., Yezikov, I.M.,
Prikhodchenko, M.M. and Sakharova, N.M. Engineers

TITLE: From the Experience of Operation of Recuperative Soaking
Pits (Opyt ekspluatatsii rekuperativnykh nagrevatel'nykh
kolodtsev)

PERIODICAL: Stal', 1959, Nr 2, pp 170-175 (USSR)

ABSTRACT: The development of the soaking pit practice on the Chelyabinsk Works is described. The recuperative soaking pits fired with a mixture of coke-oven and blast furnace gas (cal. value 2100 k cal/m³) with air preheated to 650-800°C are heating ingots from an average temperature of 780°C (for 88-90% of ingots) to 1120-1290°C (fig.1). The weight of the ingots varies from 2.65 ton to 6.2 ton (average 5.1 ton). Main points: the introduction of the removal of liquid slag, using additions of a carbonaceous mass (60-65% coke breeze, 30-35 quartz sand and 5-7% of lime) in an amount of 1.1 - 1.2 ton after every 14-16 charges and experimental heating of ingots in a low oxidising atmosphere (air excess coefficient 0.85-0.90)

Card 1/2

SOV/133-59-2-23/26

From the Experience of Operation of Recuperative Soaking Pits

which reduces the formation of scale by 30% but with a
4.4% increase in the consumption of fuel. There are
5 figures, 2 tables and 6 Soviet references.

ASSOCIATION: Chelyabinskiy Metallurgicheskiy Zavod (Chelyabinsk
Metallurgical Works)

Card 2/2

GULUNOV, Vasiliy Slangeriyevich; TARSHIS, D.M., red.izd-va; ISLENT'YEVA,
P.G., tekhn. red.

[Operation of soaking pits with liquid slag removal] Rabota nag-
revatel'nykh kolodtsev pri zhidkoy shlakoudalenii. Moskva, Me-
tallurgizdat, 1962. 110 p. (MIRA 16:2)
(Furnaces, Heating) (Slag)

S/133/62/000/003/007/006
A054/A127

AUTHORS: Blokhin, Ye. P., Samoylovich, Yu. A., Gulunov, V. S., Sakharova, N. M., Liberman, L. F., Zolotuyeva, S. M.

TITLE: Accelerated heating of stainless steel ingots in heating pits with central burner

PERIODICAL: 'Stal', no. 3, 1952, 276 - 279

TEXT: At the Chelyabinskij metallurgicheskiy zavod ('Chelyabinsk Metallurgical Plant) the col 1x18H9T (1Kh18N9T) stainless steel ingots are reheated for 15 - 19 hours prior to rolling in recuperating heating pits with central burner; in the first 10 - 11 hours a temperature of 1,280 - 1,300°C is attained, depending on the ferrite-content (alpha-phase) of the steel. The holding time is 5 - 8 hours; the ingot surface temperature is kept below 1,240-1,200°C. Tests were made to increase the reheating rate. Ingots of 530 x 530 - 620 x 620 mm (widening upward), weighing 4.5 tons were tested in the heating pit, with liquid slag skimming and fired with blast-furnace coke-gas (calorific value: 2,200 cal/standard m³). 13 ingots were heated at the maximum rate with a holding time of not longer than 1 1/2 - 2 hours; the entire heating period lasted 7 1/2 hours.

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S/133/62/000/003/007/008

A054/1127

Accelerated heating of...

The test ingot surface temperature was 1,280 - 1,300°C. At the same time check tests with the conventional 19-hours heating period and at a pit-temperature of 1,260 - 1,270°C were carried out. In the accelerated method a temperature of 1,280°C of the ingot surface was attained in 6 hours. The temperature differential in the middle section was 80°C and could be reduced to 30°C during the next 1 - 1 1/2 hours holding time. Over the height of the ingot, the maximum temperature differential was 100 - 150°C at the beginning of heating, but it was reduced after 3 - 4 hours in the accelerated process (in the conventional process this required 6 - 7 hours). The ingots reheated by the accelerated process had good rolling properties. There were no rejects in blooms due to surface defects and microstructure; the quick reheating process (at raised temperatures) did not increase the alpha-phase content of the finished product. The rejects of rolled products due to dross and haircracks were also reduced. As during accelerated heating the maximum temperature differential in the cross section between the ingot surface and the coldest point of the ingot may attain 550 - 650°C, the effect of heat stresses arising in the first period of heating had to be determined. Calculations (partly carried out by Yu. A. Samoylovich on a Strela computer), taking into account the high ductility of 1Kh18N9T grade steel, showed that at $\Delta t_{max} = 650^{\circ}\text{C}$ the stresses are reduced from 118 to 66 kg/mm². As the tensile

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S/133/32/000/003/007/CC8

A054/A127

Accelerated heating of...

strength of 1Kh18N9T steel specimens is rather high (above 150 kg/mm²), the possibility of rupture due to heat stresses is remote. The accelerated reheating tests supported the accuracy of these calculations. There are 4 figures, 1 table and 7 Soviet-bloc references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki (All-Union Scientific Research Institute of Metallurgical Heat Technique) and Chelyabinskii metallurgicheskiy zavod (Chelyabinsk Metallurgical Plant)

Card 3/3

GULUNOV, Vasiliv Slangerivevich; ZOLOTUYEVA, Svetlana Mikhaylovna;
LIBERMAN, Lev Fedorovich; SAKHAROVA, Ninel' Maksovna;
SAPIR, Yakov Romanovich; GOLUBCHIK, R.M., red.;
DOBZHINSKAYA, L.V., tekhn. red.

[Metal heating before rolling] Nagrev metalla perek pro-
katkoi; spravochnik dlja rabochikh. [By] V.S.Gulunov, i dr.
Moskva, Metallurgizdat, 1963. 220 p. (MIRA 16:10)
(Rolling (Metalwork))--Equipment and supplies
(Furnaces, Heating—Handbooks, manuals, etc.)

GULUNYAN, E.A.

Organization of oral hygiene for children of school and pre-school age. Vrach.dele no.3:313 Mr '60. (MIRA 13:6)

1. Oblastnaya stomatologicheskaya poliklinika g. Zaporozh'ya.
(ZAPOROZH'YE--MOUTH--CARE AND HYGIENE)

ABDULRAGIMOV, T.I., kand.tekhn.nauk; GULUSHANOVSKAYA, V., red.; BAGIROVA, S.,
tekhn.red.

[Water economy of Azerbaijan] Vodnoe khoziaistvo Azerbaidzhana.
Baku, Azerbaidzhanskoe gos.izd-vo, 1959. 23 p. (MIRA 13:9)
(Azerbaijan--Irrigation)

PETROV, I.R.; prinimali uchastiye: KULAGIN, V.K.; LEMUS, V.B.; KUDRITSKAYA, T.Ye.; KOROSTOVSEVA, N.V.; KUDRIN, I.D.; GULYA, G.I.

General adaptation reactions during the action on the body of noxious stimuli. Vest.AMN SSSR 17 no.5:87-93 '62. (MIRA 15:10)
(ADAPTATION (PHYSIOLOGY))

GULYACHKIN, K.N.; KIVATITSKIY, M.M., inzh., retsenzent; VLASOV,
A.G., inzh., retsenzent; SEMENCHENKO, V.A., red.izd-va;
UVAROVA, A.F., tekhn. red.

[Laboratory work on the course "Machine tools."] Laboratornye
raboty po kursu "Metalllorezhushchie stanki." Moskva, Mashgiz,
1963. 230 p. (MIRA 16:12)
(Machine tools--Laboratory manuals)

САМОХИМСКИЙ, А.Н.; АВДУЛЛАЕВ, В.С. и др. Учебник по физической химии.
Кн. 2, главы 9-12.

[Calculating the precision of machining on the lathe (1973)]
Расчеты точности обработки на металлоизделиях станков
какт. Москва, Изд-во Машиностроения, 1973, 2-е изд.
(МФН 17-11)

G. I., Georgiy Genrikhovich; GUYA-VANOV, Vasilii Vasil'evich,
TEMKIN, Grigeriy Yakovlevich; MELNIKOVA, Ye.V., redaktor;
CHICHAKOV, A.N., tekhnicheskij redaktor

[Continuity of production in the Evg.Sokolova typesetting plant]
Potochnost' proizvodstva v nabornom tskehe tipografil imeni Evg.
Sokolovoi. Moskva, Gos.izd-vo "Iskusstvo," 1957. 52 c.
(Typesetting) (MLA: 10.10)

11800 1521 1087

32919
S/194/61/000/011/049/070
D271/D502

AUTHORS: Bystrov, Yu.M., Gulya-Yanovskiy, V.V., Komissarova, R.F., Merkulov, L.G., Novitskiy, V.A. and Sil'verstov, S.P.

TITLE: Nickel plating of type metal stereo plates in the ultrasonic field

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 11, 1961, 11, abstract 11 E81 (Poligr. proiz-vo, 1961, no. 4, 13-15)

TEXT: The process of electrodeposition of metals in the ultrasonic field is briefly considered; it is pointed out that ultrasonics intensify this process which is explained by acceleration of diffusion phenomena in the near-cathode layer. Nickel plating of stereos with the purpose of increased wearability was conducted under the influence of ultrasonic frequency of 27 kc/s, with the specific power of 0.004 - 7 W/cm². It is shown that application

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S/194/61/000/011/049/070

D271/D302

Nickel plating of type metal...

of ultrasonics made it possible to shift the threshold of quality coverage from 1.5 to 5 A/dm²; this accelerates by four times the process of nickel deposition. At the same time, ultrasonic vibrations make it possible to raise cover hardness to 450 kg/mm² (instead of 250 when usual methods of nickel plating are used). It is noted that it is not worth while increasing the ultrasonic intensity beyond 0.5 W/cm² as the deposition of metal function of current remains virtually constant after this limit. An experimental ultrasonic bath was developed with a capacity of 80 l, using two vibrators type PM-1.3; experimental plating was done in this bath in optimal conditions. It was found that by using ultrasonics nickel plating can be accelerated altogether by 6-8 times. 5 figures.
1 table. Abstracter's note: Complete translation /X/

Card 2/2

GULYACHENKO P.P.

TOVPENETS, Ye.S., kandidat tekhnicheskikh nauk; PISKUN, V.I., inzhener;
SHLEPCHENKO, L.B., inzhener; GULYACHENKO, P.P., inzhener; LEONOV, L.I.,
inzhener; POTAPOV, I.P., inzhener.

Improving the quality of the cutting teeth of cutting machines
and of combined mining machines. Ugol' 29 no.10:23-26 O '54. (MLR 7:11)

1. Donetskij industrial'nyy institut (for Tovpenets & Piskun) 2. Krasnoluchskiy mashinostroitel'nyy zavod (for Shlepchenko, Gulyachenko & Leonov) 3. Kombinat Stalinugol' (for Potapov)
(Coal--Mining machinery)

ANDRUSHEVICH, Yu.M.; GULYACHKIN, K.N., inzh., retsenzent; KUDINOV,
V.A., kand. tekhn. nauk, red.; SEMENCHENKO, V.A., red. izd-
va; DEMKINA, N.F., tekhn. red.

[Designs of drives for medium-size lathes; the various types
and their effect on the dynamics of speeding up and reversing]
Konstruktsii privodov srednikh tokarnykh stankov; varianta,
ikh vliianie na dinamiku razgona i reversirovaniia. Moskva,
Mashgiz, 1963. 88 p.
(MIRA 16:6)
(Lathes--Electric driving)

GULYAKEVICH, N., inzhener.

Using pneumatic water tanks in agricultural water supply systems.
Sel'stroi.10 no.2:19 F '55. (MIRA 8:4)
(Water supply, Rural) (Tanks)

GULYAKEVICH, N., inzhener.

Supplying water to individual buildings. Zhil.-kem.khoz. ?
no.9:18-19 '57. (MIRA 10:10)
(Water-supply engineering)

The periodicity of nitrogen-potassium treatment of sugar beet. I. V. Gulyakina. *Sukhovskie Poldosty*, 1917, No. 7, *Khimičeskij zhurnal*, No. 1, No. 1, 102-103. A sharp decrease in N during the period of sugar accumulation causes an increase in the yield of beets and an increase in their sugar content. The effect from the K increases during this period is greater if less N is used. A conclusion is reached that during the 1st period of vegetation more N is required, and less in the 2nd period of vegetation. The amt. of K should be increased during the 2nd period. W. R. Henn

15

Growth and quality of sugar beet root as influenced by
periodical supply of nitrogen and potassium. I.
Gulyakina. *Compt rend Acad Sci U.R.S.S.* 24, 12-15
(1954) English. Previous expts. (L. J. 33,
1952) were continued and Holling's nutrient mix
was applied as before. It was shown that high amounts of N
was absorbed by the plant during leafage. When sugar
is abundant intensive root growth and sugar storage are taking
place, the N requirements are considerably reduced. If
the sugar beet is given less N at that time, the protein
breakdown in the aging leaf is accelerated, within limits
it has a pos. effect on the root yield. With too rapid a
breakdown of the proteins the leaves die away prematurely
and the root weight is decreased. Leaf growth is also
affected by a supply of K, a deficiency of which eventually
reduces the root weight. 5 references. A. H. Krapp

AIAA METALLURGICAL LITERATURE CLASSIFICATION

1. GULYAKIN, I.V.
2. USSR (600)
4. Agriculture
7. Use of fertilizers. Moskva, Sel'khorgiz, 1951

9. Monthly List of Russian Accessions. Library of Congress, February, 1953. Unclassified.

Gulyakin, I. V.

Chemical Abstracts
Vol. 48 No. 5
Mar. 10, 1954
Soils and Fertilizers

The decomposition of crop residues from perennial grasses and the influence of nitrogen fertilizers on the yield of spring wheat in relation to the time of plowing under the sod. V. V. Gulyakin, P. M. Smirnov, K. M. Khalov, V. I. Kurelenok, and V. P. Kurochkin. *Izvest. Timiryazev. Sel'skokhoz. Akad.*, No. 2(3), 41-58(1953). — It is shown that plowing under a sod crop in the early fall supplies more available N than plowing it under in late fall. In the latter case the N becomes associated with complex unhydrolyzable forms. Data are presented showing the increase in yield of spring wheat. J. S. Joffe

GULYAKIN, I. V.

The Committee on Science and Culture of the Council of Ministers USSR in the edition of science and inventions announces that the following scientific works, popular science books, and textbooks have been submitted for competition for Stalin Prize for the year 1954. (Sovetskaya Kultura, Moscow, No. 10, 1954)

Name	Title of Work	Submitted by
Sokolov, N. S.	"Elements of Farming" (textbook)	Moscow Agricultural Academy imeni K. A. Timiryazev
Yarkov, S. P.		
Chizhevskiy, M. G.		
Cherkasov, A. A.		
Shestakov, A. G.		
<u>Gulyakin, I. V.</u>		
Peterburgskiy, A. V.		
Troitskiy, A. N.		
Luk'yanyuk, V. I.		
Savzdarg, E. E.		
Trofimovich, A. Ya.		
Kuznetsov, V. S.		
Kudryavtsev, N. Ye.		
Pronin, A. F.		
Alekhin, N. V.		
Sachli, S. N.		

Gulyakin, I. V.

AG

"The influence of methods of applying superphosphate and supplementary fertilizer ingredients on the utilization of phosphorus by plants. I. V. Gulyakin, P. M. Smirnov, B. P. Pleshkov, and T. V. Smirnov (K. A. Timiryazev Agr. Acad., Moscow). *Pochvovedenie* 1955, No. 7, 23-36.—Plot expts. were conducted with oats and potatoes to study the influence of superphosphate, contg. tagged P mixed with manure and limestone, on the intake of P by plants. Deep incorporation of the phosphates is utilized more efficiently than shallow incorporation. The latter method gives better utilization of P in the early stages of growth, whereas the former method gives better utilization in the later stages of growth. The best method of supplying P is some row application and deep incorporation of phosphates. Mixed with manures, the P application gives better results in the later stages of growth than without manure. Limestone reduces the intake of P. Addns. of NH₄NO₃ when placed in the row decreased the intake of P in the early stages of growth and increases it in the later stages. 32 references.

J. S. Josse

(3)

USSR / Plant Physiology. Mineral Nutrition.

I

Abs Jour : Ref Zhur . Biol., No 8, 1958, No 34259

Author : Gulyelkin, I. V.; Yudinstsova, Ye. V.

Inst : Timiryazev Agricultural Academy

Title : Uptake of Products of Fission by Plants and Their Effect
on the Growing Organism

Orig Pub : Izv. Timiryazevsk. s.-kh. akad., 1956, No 5, 121-142

Abstract : A study was made of the products of fission of heavy nu-
clei (strontium, cesium, cerium, ruthenium, zirconium)
entering into plants of wheat, oats, sun flowers and beans,
growing in water and sand cultivation. Wheat plants Triticum
aestivum received fractionated nourishment; periodically,
every 24 hours, plants were transposed from the nutritive
mixture to bowls with a radioisotope (0.05 m. curie per li-
ter) and then back again. Different intensity of absorption
and distribution of separate isotopes among organs was

Cord 1/3

USSR / Plant Physiology. Mineral Nutrition.

I

Abs Jour : Ref Zhur . Biol., No 8, 1958, No 34269

established. The absorption of isotopes by plants of the soil culture was slowed down, due to the absorption of some by soil. Radioactive isotopes entering into the above-ground portion of the plant, concentrated primarily in the straw, less in the husk and relatively small quantity of them accumulated in the seeds. Sr⁹⁰ was accumulating in the seeds in a significant quantity. By applying radioactive isotopes to the upper leaf surfaces of sun flowers and beans, established a weakening of their movement about the plants. Sr⁹⁰ was accumulating, for the large part, in old organs, while Cs¹³⁷ was accumulating in young organs. Application of isotopes in later periods of growth, helped their accumulation in the seeds. Wheat and oat plants are more susceptible to the harmful effect of radioactive emanation in

Card 2/3

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USSR / Soil Science. Mineral Fertilizers.

J

Abs Jour: Ref Zhur-Biol., No 7, 1958, 29494.

Author : Gulyakin, I.V., Smirnov, P.M. Pleshkov, B.P.,
Shmyreva, T.V.

Inst : Not given.

Title : Plant Phosphorous Uptake in Relation to the Methods of Application of Superphosphate and Accompanying Fertilizers. (Postupleniye fosfora v rasteniya v zavisimosti ot sposobov vneseniya superfosfata i soputstvuyushchikh udobreniy).

Orig Pub: Dokl. Mosk. s.-kh, akad. im K. A. Timiryazeva,
1956, vyp. 22, 304-314.

Abstract: The effect of the methods and depth of application on plant P absorption and the role of organic substances, lime and other fertilizers when applied together with P_2O_5 were studied in

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USSR / Soil Science. Mineral Fertilizers.

J

Abs Jour: Ref Zhur-Biol., No 7, 1958, 29494.

Abstract: field experiments with oats and potatoes on the cultured loam soil at the experimental field cultivation station of the Moscow Agricultural Academy im. K. A. Timiryazev. P_C was used in the tests which had been tagged with radioactive phosphorus. P_C was applied to the oats in the rows upon sowing or broadcast and sunk to a depth of 7-8 and 18-22 cm as far as the sowing, to the potatoes placed in the holes when planting or set to a depth of 12-22 cm as far as the sowing. In individual variants the P_C was applied together with compost or Naa. The results showed that during the first vegetation period, about 7 days after the appearance of shoots, the plants absorbed the P in the shallow setting more than 10 times the rate in the deep one, and about

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USSR / Soil Science. Mineral Fertilizers.

J

Abs Jour: Ref Zhur-Biol., No 7, 1958, 29494.

Abstract: 1½ months in the deep setting at 5 times more than in the shallow one. The best supply of P to the plants from fertilizers during the vegetation period was provided when the P_c was applied to the rows and combined with deep setting. Compost placed together with P_c facilitated better P feeding in the later phase of plant growth. Lime decreased the uptake of phosphorus P_c . This was increased with N_{aa} when applied in conjunction with P_c .

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USSR / Plant Physiology. Mineral Nutrition.

I

Abs Jour: Ref Zhur-Biol., No 7, 1958, 29388.

Author : Gulyakin, I. V., Yudintseva, Ye. V.

Inst : Not given

Title : Plant Uptake of Radioactive Isotopes of Strontium, Cesium, Ruthenium, Zirconium, and Cerium.
(Postupleniye v rasteniya radiosaktivnykh izotopov strontsiya, tseziya, ruteniya, tsirkoniya i. tseriya).

Orig Pub: Dokl. AN SSSR, 1956, 111, Nol, 206-208.

Abstract: Radioactive isotopes of Sr and Cs in water cultures at a concentration of 0.05 millicuries per liter was actively absorbed by the above soil portion of the plant, and Zr and Ru were retained in the roots. The plant radioactive isotope content in-

Card 1/2

USSR / Plant Physiology. Mineral Nutrition.

Abs Jour: Ref Zhur-Biol., No 7, 1958, 29388.

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R000617320003-9
They showed increased toward the end of the experiment.

Abstract: There showed no harmful effects on the plants. In an experiment with oats in radioisotope concentration of 1 millicurie per liter lowered grain output was observed. In both cases the radioactive isotopes accumulated for the larger part in the vegetative organs and in relatively smaller quantities in the reproductive ones.

Card 2/2

GOLYAKIN, I.V.

Action of radioactive isotopes on plants. I. V. Gulyakin
and B. V. Yudintseva (K. A. Timiryazev Agr. Akad., Moscow). Doklady Akad. Nauk S.S.R. 111, 475-7 (1956).
Cs¹³⁷ produces a neg. effect on growth and development,
particularly of reproductive organs, of wheat; Cs¹³⁷ and
Ce¹⁴¹ act similarly, as does Sr⁹⁰. Oats gave results similar to
those obtained with wheat. The effect is strongest when
applied during bush and branch formation. G. M. V.

GULYAKIN, I.V.

Entry of radioactive isotopes into plants through the leaves. I. V. Gulyakin and E. V. Yudintseva (K. A. Timiryazev Agr. Acad., Moscow). Doklady Akad. Nauk S.S.R. 111, 702-12(1956).—Sr⁸⁵, Cs¹³⁷, Ce¹⁴¹, and Ba¹³⁹ deposited on leaves of sunflower and bean are accumulated in various plant parts; Cs is especially accumulated in seeds. Sr and Ce isotopes tend to move sluggishly. G. M. K.

CULYANIN, I. V. and MILCHIKOVSKIY, V. M.

"Behavior of microquantities of strontium, cesium ruthenium and zirconium in the soil and in plants according to the data obtained in the studies with the application of the radio-active isotopes of these elements," a paper submitted at the International Conference on Radioisotopes in Scientific Research, Paris, 9-20 Sep 57

Country:	: USSR	J
Category:	Soil Science. Mineral Fertilizers.	
Abs. Journ.:	53.14	
Author:	Gulyakin, I.V.; Yudintseva, Ye.V.	
Institut.	Timiryazev Agricultural Academy	
Title:	Plant Uptake of Radioactive Fission Products and Their Accumulation in the Crop after the Application of Lime, Humus and Potash Fertilizers	
Orig. Pub.:	Izv. Timiryazevsk. s.-kh. akad., 1957, No.2, 121-140	
Abstract:	Lime and compost which promoted fixation in the absorbed state of radioactive strontium (Sr^{89} and Sr^{90}), cerium (Ce^{144}), ruthenium (Ru^{106}), and cesium (Cs^{137}), when applied to the soil, reduced the plant uptake of these. A considerably smaller content of decomposition products is noted in the reproductive organs. The authors consider it an opportune time to raise the question of possible spreading of radioactive decomposition products in nature. --V.V. Prokoshev	
Card:	1/1	

USSR/Plant Physiology General.

I.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 95596

Author : Gulyakin, I.V., Yudintseva, Ye.V.

Inst : Timiryazevsk Agricultural Academy.

Title : Effect on Plants and Harvest Accumulation of Radioactive Fission Products with Different Distributions in the Soil.

Orig Pub : Izv. Timiryazevsk. s.-kh. akad., 1957, No 3, 53-80

Abstract : In vegetative and small field plot experiments with oats, wheat, pea and millet which were conducted on podzolic, average clayey well-cultivated soil, the effect of fission products of uranium on plants was studied; mainly of beta-emitters, with a small admixture of gamma-emitters, with a half-life of period 300-400 and more days. It was established that the harmful effect on plants of radioactive exposure to fission products of uranium depends on their

Card 1/2

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USSR/Soil Science. - General Problems.

J

Abs Zh. : Ref Zhur Biol., No 19, 1958, 86684

Author : Gulyakin, I.V., Yudintseva, Ye. V.

Inst : Timiryazev Agricultural Academy

Title : Plant Uptake of Radioactive Fission Products and the
Soil's Biological Purification from Them

Orig Pub : Izv. Timiryazevsk. s.-kh. akad., 1957, No 3, 81-109

Abstract : The plant uptake, distribution in the separate organs and
accumulation in the crop of Sr⁹⁰, Y⁹⁰, Ru¹⁰⁶, Rh¹⁰⁶,
Cs¹³⁷, Ce¹⁴⁴, Pr¹⁴⁴, Y⁹¹, Zn⁹⁵, Nb⁹⁵, Co⁶⁰ and a mixture
of β and γ -emitters containing the majority of the
indicated radioisotopes were studied in vegetation expe-
riments with wheat, peas, oats and kidney beans in aqueous
cultures. It was demonstrated that with placement of 0.25
microcurie of each radioisotope per 1 vessel (5.5 liters)

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USSR/Soil Science - General Problems.

J

Abs Jour : Ref Zhur Biol., No 19, 1958, 86684

a negative effect on the plant was not observed and the plant yield was almost undiminished. The fission products were taken up by the plant rather intensively and accumulated in large quantity in the above-ground organs. Cs¹³⁷ and Sr⁹⁰ were taken up from the solution more intensively and accumulated in aerial organs in greater quantity than other radioisotopes. The major part of the radioisotopes concentrated in the plant vegetative organs; Cs¹³⁷ and Sr⁹⁰ absolutely and relatively more than other isotopes accumulated in the reproductive organs. As the plants age, the absolute quantity of isotopes in the above-ground organs is increased, but their content is diminished per unit of dry substance. The uptake of Sr⁹⁰ and Cs¹³⁷ in plants of oats, peas, clover and timothy grass was studied in vegetation experiments in soil cultures. It was determined that Sr⁹⁰ was taken up from the soil into the plant a great deal more intensively than Cs¹³⁷. Plants can to a

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USSR/Soil Science - General Problems.

J

Abs Jour : Ref Zhur Biol., No 19, 1958, 86684

certain extent purify the soil of the Sr radioisotopes it contains; besides, the lighter the soil is in mechanical composition, the more Sr⁹⁰ is extracted from it by the plants. Sr¹³⁷ /Cs¹³⁷?/ is strongly sorbed by the soil and feebly taken up by the plant; biological means of purifying the soil of it cannot, therefore, be considered applicable. -- B.P. Pleshkov

Card 3/3

GULYAKIN, I.V., doktor biol. nauk prof.; KIRILLOVA, N.M., mladshiy nauchnyy
sotrudnik; KOROVKINA, A.V., kand. sel'skokhozyaystvennykh nauk;
YUDINTSEVA, Ye.V., kand. biol. nauk.

Effect of radiothorium on the growth and yield of wheat [with
summary in English]. Izv. TSKhA no.6:7-18 '57. (MIRA 11:3)
(Wheat) (Plants, Effect of radiothorium on)

YEMEL'YANOV, V.S., ovt.red.; BARDIN, I.P., red.; VINOGRADOV, A.P., red.;
GOL'DANSKIY, V.I., red.; GULYAKIN, I.V., red.; DOLIN, P.I., red.;
YEFREMOV, D.V., red.; KRASIN, A.K., red.; LEBEDINSKIY, A.V., red.;
MINTS, A.L., red.; MURIN, A.N., red.; NIZE, V.E., red.; NOVIKOV,
I.I., red.; SEMENOV, V.F., red.; SOBOLEV, I.N., red.; BAKHAROVSKIY,
G.Ya.; nauchnyy red.; BERKOVICH, D.M., nauchnyy red.; DANOVSKIY,
N.F., nauchnyy red.; DELONE, N.N., nauchnyy red.; KON, M.A.,
nauchnyy red.; KOPYLOV, V.N., nauchnyy red.; MANDEL'TSVAYG, Yu.B.;
MILOVIDOV, B.M., nauchnyy red.; MOSTOVENKO, N.P., nauchnyy red.;
MURINOV, P.A., nauchnyy red.; POLYAKOV, I.A., nauchnyy red.;
PREOBRAZHENSKAYA, Z.P., nauchnyy red.; RABINOVICH, A.M., nauchnyy
red.; SIMKIN, S.M., nauchnyy red.; SKVORTSOV, I.M., nauchnyy red.;
SYSOYEV, P.V., nauchnyy red.; SHORIN, N.A., nauchnyy red.;
SHREYBERG, G.L., nauchnyy red.; SHTEYNMAN, R.Ya., nauchnyy red.;
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